The opinion in support of the decision being entered today was <u>not</u> written for publication and is <u>not</u> binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

MAILED

SEP 2 4 2004

U.S. PATENT AND TRADEMARK OFFICE BOARD OF PATENT APPEALS AND INTERFERENCES

Appeal No. 2004-1846 Application No. 09/578,236

ON BRIEF

Before PAK, KRATZ and DELMENDO, <u>Administrative Patent Judges</u>. KRATZ, <u>Administrative Patent Judge</u>.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1-16.

BACKGROUND

Appellants' invention relates to a method of producing a plastic film. An understanding of the invention can be derived from a reading of exemplary claim 1, which is reproduced below.

1. A method for producing a plastic film having improved characteristics, comprising forming the plastic film by extrusion from an extruder nozzle, the film emerging from the nozzle in a melted state, distributing at least one active substance on at least one face of the film, in a region of the film having a temperature higher than the ambient temperature such that the active substance penetrate into and are retained within the film to form a single body of film, cooling the film downstream of the extruder nozzle to a solidified state at ambient temperature wherein the one or more substances are permanently incorporated in the body of the film in the solidified state to modify selected characteristics of the film.

In addition to alleged admitted prior art, the following prior art references of record are relied upon by the examiner in rejecting the appealed claims:

Siol et al. (Siol) 4,814,207 Mar. 21, 1989

Krech 6,024,824 Feb. 15, 2000
(filed Jul. 17, 1997)

Claims 1-5 and 16 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Krech. Claims 1-3 stand rejected under 35 U.S.C. § 102(b) as being anticipated by, or in the alternative, under 35 U.S.C. § 103(a) as being obvious over Siol. Claims 4-6 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Siol. Claims 1-16 stand rejected under 35 U.S.C. § 103(a) as being

prior art at pages 1 and 2 of appellants' specification in view of Siol.

We refer to the brief and reply brief and to the answer for a complete exposition of the opposing viewpoints expressed by appellants and the examiner concerning the issues before us on this appeal.

OPINION

Having carefully considered each of appellants' arguments set forth in the brief and reply brief, appellants have not persuaded us of reversible error on the part of the examiner with respect to the § 102(e) rejection over Krech. However, we find ourselves in agreement with appellants' position with regard to the other rejections maintained by the examiner. Accordingly, we will affirm the examiner's § 102(e) rejection over Krech, and we reverse the other rejections. Our reasoning follows.

Regarding the § 102(e) rejection of claims 1-5 and 16 over Krech, we note that appellants have acknowledged that the so rejected claims stand or fall together (brief, page 3). Consequently, we select claim 1 as the representative claim on which we shall decide this appeal as to that rejection.

As explained by the examiner in the final rejection and the answer, Krech discloses a method for producing a plastic sheet

(film) that corresponds to appellants' method. In this regard, Krech describes the use of an extruder; that is, a device that forces the polymeric material through an opening (nozzle), in forming a thermoplastic polymeric sheet (film). The freshly formed sheet is thereafter embedded (penetrated) with particles distributed on a face of the sheet while the substrate sheet is in an elevated temperature state such that a partially molten or softened sheet is maintained at such a temperature. Accordingly, the claimed requirement for above ambient temperature conditions during the active substance distribution that occurs after extrusion but prior to the ultimate cooling of the product sheet to ambient temperature conditions is described by Krech. See, e.g., column 2, line 55 through column 4, line 4, column 8, line 20 through column 10, line 37 and the Examples of Krech.

Appellants argue that the particles of Krech are not active particles because they do not modify the mechanical or chemical properties of the polymer material of the claimed film.

Consequently, Krech does not disclose appellants' claimed active substance distribution step. We disagree for reasons stated by the examiner at pages 4 and 5 of the answer.

In particular, we note that representative claim 1 specifies that the so called "active substances" are substances that

"modify selected characteristics of the film" when incorporated in the film. As explained by the examiner, Krech's description of carbon black as a particle that can be embedded in the polymeric sheet (film) is embraced by the so called "active substance" claimed as evidenced by dependent claim 16, wherein carbon is listed as one example of a so called "active substance" that can be incorporated in the film. See column 8, lines 40-43 of Krech. While Krech discloses that carbon black functions as a friction enhancing particle, representative claim 1 does not require that any particular characteristic of the film be modified. Moreover, Krech need not describe every characteristic of the film that is modified by a particular additive particle disclosed therein to describe a sheet (film) that is embraced by representative claim 1. On this record, we affirm the examiner's \$ 102(e) rejection of claims 1-5 and 16 over Krech.

Our disposition of the examiner's rejections employing Siol as a reference is another matter. Concerning the examiner's § 102/§ 103(a) rejection of claims 1-3 and the § 103(a) rejection of dependent claims 4 and 6 over Siol, the examiner has not discharged the burden of fairly explaining how the coating of the panels of Siol with a scratch and weather resistant film that is cured in situ inherently results in that coating penetrating into

the panel of Siol as urged by the examiner (final rejection, page 5).

The examiner, in relying on a theory of inherency, must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristics necessarily flow from the teachings of the applied prior art. See In re Robertson, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999). Inherency cannot be established based on probabilities or possibilities. See In re Oelrich, 666 F.2d 578, 581, 212 USPQ 323, 326 (CCPA 1981). Here, the examiner simply has not provided persuasive support for the allegedly inherent description of a penetrating coating being described in Siol.

While the examiner argues, in effect, that molecular diffusion occurs (answer, page 5), the examiner has not pointed to any specific disclosure in Siol respecting such diffusion or otherwise fairly explained why and how such diffusion must occur so as to necesarily result in the penetration of the particular coating employed by Siol into the panel of Siol. In this regard, we are aware of the examiner's reference to column 8, lines 16-20 of Siol, wherein Siol discloses coating panels that are at an elevated temperature but below the glass transistion temperature

(melting temperature) of the panel. However, appellants' specification describes maintaining a film surface in a melted state during an "active substance" penetrating deposition. See, e.g., page 5, line 30 through column 6, line 6, column 6, line 28 through column 7, line 3 and page 10, lines 19-25 of appellants' specification.

Because the examiner's § 102(b) and § 103(a) rejections over Siol are predicated on that inherency theory which has not been satisfactorily developed by the examiner, we shall not sustain the examiner's rejections over Siol.

Moreover, the separate § 103(a) rejection of claims 1-16 over alleged admitted prior art in appellants' specification in combination with Siol is also predicated on the examiner's inherency theory with respect to Siol in that the examiner acknowledges and agrees with appellants' position that the "admitted" prior art does not teach the process as claimed. See page 6 of the answer. As a result, the examiner relies on Siol to allegedly teach coating an article while the article is at an elevated temperature after extrusion. However, as explained above, the examiner has not established that Siol teaches the claimed penetration would necessarily occur during such a coating step. Nor has the examiner fairly explained why one of ordinary

skill in the art would find a suggestion to modify the alleged admitted prior art plastic films that are used for packaging based on the method for applying a scratch resistant coating to an article disclosed in Siol. Thus, the examiner has not established a particular suggestion based on the prior art for the proposed combination of the admitted prior art teachings and Siol and that such a combination would have been attended by a reasonable expectation of success in arriving at the claimed subject matter. See In re Rouffet, 149 F.3d 1350, 1359, 47 USPQ2d 1453, 1459 (Fed. Cir. 1998). It follows that we will not sustain the examiner's § 103(a) rejection of claims 1-16.

CONCLUSION

The decision of the examiner to reject claims 1-5 and 16 under 35 U.S.C. § 102(e) as being anticipated by Krech is affirmed. The decision of the examiner to reject claims 1-3 under 35 U.S.C. § 102(b) as being anticipated by, or in the alternative, under 35 U.S.C. § 103(a) as being obvious over Siol; to reject claims 4-6 under 35 U.S.C. § 103(a) as being unpatentable over Siol; and to reject claims 1-16 under 35 U.S.C. § 103(a) as being unpatentable over alleged admitted prior art at pages 1 and 2 of appellants' specification in view of Siol is reversed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR \S 1.136(a).

AFFIRMED-IN-PART

CHUNG R. PAK

-Administrative Patent Judge

PETER F. KRATZ

Administrative Patent Judge

BOARD OF PATENT

APPEALS

AND

INTERFERENCES

ROMULO H. DELMENDO

Administrative Patent Judge

PFK/sld

KUDIRKA & JOBSE, LLP ONE STATE STREET SUITE 800 BOSTON, MA 02109